

# **InstaVine**

**Team # 4**

**Nicholas Yingst**

**Manan Vyas**

**Shruti Sharma**

# Introduction

- The Instagram app went viral soon after its launch. It became so popular that Facebook decided to take over it.
- The motivation for this project is to take the features of Instagram one step closer and create a real-time video Instagram.
- Recreate some of the cool Image processing filters that we studied in EE569 and apply it on real time videos.

# Hardware and Setup

## Video Quality – Speed – Internal Memory trade off.

We chose DM6437 as our Video Processing Board as it gives ;

- 720x480i I-O Video resolution (Better Quality !)
- Can connect to external displays (Helps in demo).

The main drawback of 6416 : Can only operated with the on board LCD which is too small to give a good demo.

The main drawback of 6437 is smaller internal memory (256kB) which means we need to;

- Cache Input video frames efficiently.
- Optimize the video processing code.

Different combination of the DIP Switches on the board will select various filters.

# Edge Detection



# Cartoon Effect



# Oil Painting Effect



# Vignette Effect





# Comic Book Effect



# White Balance Correction



**Thank You**

**Questions ?**